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(51) INTL.CL.<sup>5</sup> B65D-085/78; B65D-083/76

(19) (CA) **APPLICATION FOR CANADIAN PATENT** (12)

(54) Container for Ice-Cream Products

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## CONTAINER FOR ICE-CREAM PRODUCTS

The invention relates to a container according to the introductory part of Claim 1.

A known container of this type comprises a cylindrical open tube in which a sliding base-piece is arranged, which in its lowest position can normally be prevented from moving upwards and downwards by two rows of internal projections running peripherally, but which can be moved when acted on by a given force.

Containers of this kind can accommodate only a limited quantity of the product, because at a certain length of the tube the base-piece can no longer be moved along the total length of the tube with the user's finger. In this case the base-piece must be provided with a vertical element of suitable length to move it, which, however, is a hindrance in packing and storage.

Another disadvantage of such a container is that the pressure on the sliding base-piece required to force the product out at the upper end of the container is applied to the entire product, and compresses it. This is above all a disadvantage when, as is often the case, the product comprises several ingredients of varying consistency, e.g. ice-cream and fruit. These ingredients are then mixed with each other, which is undesirable in terms of taste and appearance.

The purpose of the invention is to provide a container for ice-cream products which enables the product contained within to be delivered at the top end without the appearance of the product being affected disadvantageously or its ingredients being mixed.

This task is carried out according to the invention by the features given in the characterising section of Claim 1. Suitable embodiments of the invention are given in the sub-claims.

In the case of a container constructed in this way the delivery of the ice-cream product contained within is effected by initially forcing the top section of tube downwards. This does not compress the product contained within, with the result that its appearance is not changed and its ingredients not mixed.

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The individual tubes, which advantageously consist of a flexible, ductile material, can be locked in the extended position. For this purpose each length of tube can be provided at the lower end with inner projections distributed peripherally or with an annular ring, which can engage into an annular groove in the upper end of the corresponding length of tube. The bottom tube also advantageously has such projections or an annular ring in its lower end, to hold the sliding base-piece.

The sliding base-piece can be constructed in the form of a cap which can be tapered towards the top in the form of a cone and which can be provided with an annular groove into which the projections or annular ring of the bottom section of tube can engage.

The lengths of tube advantageously flare out at the lower end to form a collar, so that when a container comprising, for example, three lengths of tube is compressed and the top tube has been emptied, its collar engages that of the middle tube, so that the latter can be pressed down.

The sliding base-piece can be provided with a vertical element underneath, by means of which the sliding base-piece can be moved. The bottom length of tube can be closed by a base-piece which has an opening sufficiently large to permit the sliding base-piece to be moved.

If the bottom length of tube is open at its lower end, it can be provided on the inside with additional projections or an additional annular ring so that the sliding base-piece in its lowest position can be prevented from sliding up or down.

Figures 1 and 2 give an example of the invention by way of explanation. They show:

Fig. 1 in plain view on the left and in axial section on the right a container comprising three lengths of tube in extended configuration, and

Fig. 2 a cross-section of the compressed container in the region of the sliding base-piece.

According to the invention the container comprises three telescoping cylindrical tubes 1 to 3, of which the top tube 1 has a greater diameter than the middle tube 2 and this in turn has a greater diameter than the bottom tube 3.

Each tube has at the lower end an inner annular ring 5, which snaps into an external annular groove 6 in the upper end of the corresponding tube. The top tube does not require any such annular groove.

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The annular ring 5 of the bottom tube 3 contains a sliding base-piece 4 in the form of a cap. All the tubes flare out at the lower end to form a collar 7. During compression this causes the range of movement of the tube 1 in relation to the tube 2 to be restricted so that the tube 2 can be pushed down by the tube 1.

At the upper end the container can be closed with a cover 8 or a similar sealing element, such as foil or the like. The cover can also be held by an enlargement 5, which engages into an annular groove 6 on the top tube 1.

WHAT HAVE CLAIM IS:-

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1. Container for ice-cream products, consisting of a tubular body, which can be closed at its lower end by a sliding base-piece, characterised in that the tubular body comprises at least two telescoping lengths of tube (1 to 3).
2. Container according to Claim 1, characterised in that the tubes (1 to 3) can be held stationary in relation to one another when the container is in the extended position.
3. Container according to Claim 1 or Claim 2 characterised in that the diameter of the tube (e.g. 1) which is uppermost in the extended position of the container is greater than that of the next lower tube (e.g. 2).
4. Container according to Claim 3, characterised in that the lengths of tube have projections on the inside at the lower end distributed peripherally, and in the region of the upper end have an external annular groove (6).
5. Container according to Claim 4, characterised in that the projections are in the form of an annular ring (5).
6. Container according to one of the Claims 1 through 5, characterised in that the tubes (1 to 3) flare out to form a collar (7) at the lower end.
7. Container according to one of the Claims 1 through 6, characterised in that the sliding base-piece (4) is in the form of a cap.
8. Container according to Claims 4 or 5 and 7, characterised in that the cap is provided with an annular groove.
9. Container according to Claims 1 through 8, characterised in that the lower tube has at its lower end on the inside additional projections to limit the downward movement of the sliding base-piece.
10. Container according to one of the Claims 7 through 9, characterised in that the cap tapers towards the top in the form of a cone.
11. Container according to one of the Claims 1 through 10, characterised in that the sliding base-piece is provided with a vertical element underneath.
12. Container according to Claim 11, characterised in that the bottom tube has a base-piece underneath with an opening.

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13. Container according to one of the claims 1 through 12, characterised in that the tubes (1 to 3) consist of a flexibly ductile material.

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**Abstract**

The invention relates to a container for ice-cream products which comprises a tubular body, which can be closed with a sliding base-piece at its lower end. The tubular body comprises at least two telescoping tubes which when compressed release the product contained within at the top end of the container.



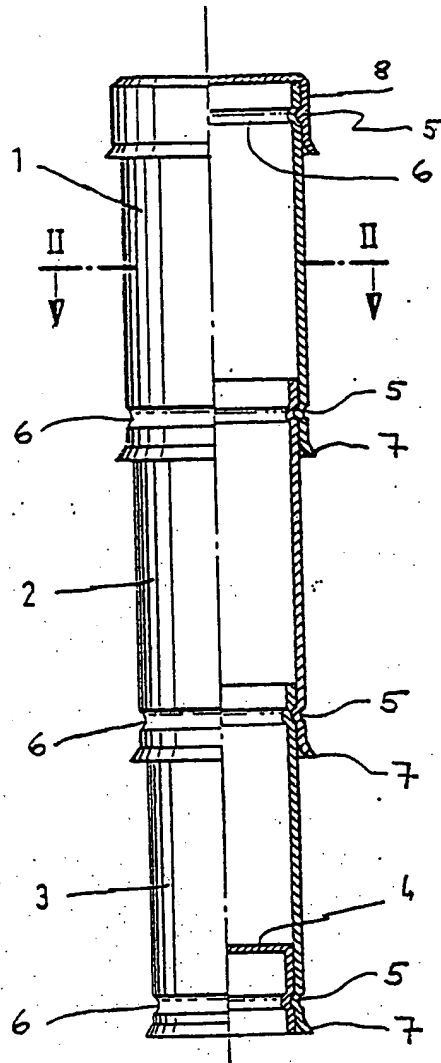


FIG. 1

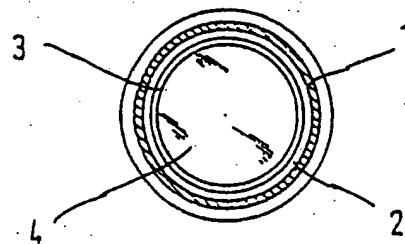


FIG. 2

